Fibonacci Bracelet

Kit contains:

- 40 Beads
- 1 Pipe Cleaner

You will need: pencil and paper for important math purposes.

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LET'S TALK MATH!

A **sequence** is a set of numbers, shapes, or other mathematical objects arranged in order according to a rule.

Examples:

2, 4, 6, 8, 10, ...

A, B, C, A, B, C, A, B, C, ...

(circa 1170–1240)

Long ago, there lived a mathematician named Leonardo of Pisa (like the tower). His dad was named Bonaccio, so you might know him as Bonaccio's kid, Fibonacci.

He made a sequence that is "grown" from the "seed" numbers **1** and **1**. Add two consecutive **terms** together to get the next number in the sequence.

1, 1, 2

1 + 1 = 2

The Fibonacci sequence keeps growing! Add the last two numbers to get the next:

1, 1, 2, 3, 5, 8, ...

1 + 1 = 2
1 + 2 = 3
2 + 3 = 5
3 + 5 = 8

Do you notice those dots after the 8 (...)? That means the sequence goes on forever. Time to get out a pencil and paper. Use your addition skills to figure out the next few numbers in the Fibonacci sequence.

Hint to get you started:

5 + 8 = ?

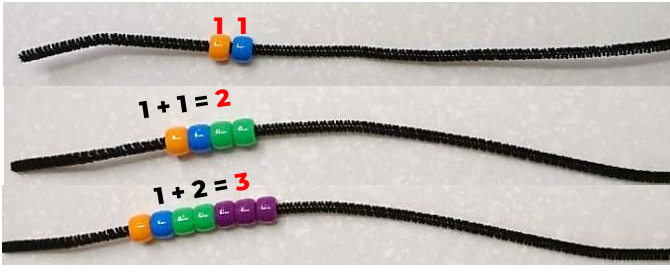
What's your highest Fibonacci number?

Now imagine different seed, or beginning, numbers. What sequence can you grow from **2** and **1**? (Start with 2 + 1 = 3.)

Now use your new math skills to...

MAKE A FIBONACCI BRACELET!

String beads onto your pipe cleaner in blocks of colors to form the Fibonacci sequence. Start with 1 and 1.



Your colors will vary, so experiment! When you're finished, twist the ends of the pipe cleaner together to form the bracelet. There will be leftover beads.

If you're inspired, test out sequences of your own!